



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|----------------------|-------------------------|------------------|
| 09/744,100 | 01/16/2001 | Rebecca E. Cahoon | BB-1174 | 3051 |
| 23906 | 7590 05/06/2003 | | | |
| E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE | | | EXAMINER | |
| | | | HUTSON, RICHARD G | |
| | ON, DE 19805 | | ART UNIT | PAPER NUMBER |
| | • | | 1652 | 19 |
| | | | DATE MAILED: 05/06/2003 | ι <i>ι</i> ' |

Please find below and/or attached an Office communication concerning this application or proceeding.

| * | | | A | | |
|---|--|-------------------------|--|--|--|
| Office Action Summary | | Applicati n N . | Applicant(s) | | |
| | | 09/744,100 | CAHOON ET AL. | | |
| | | Examiner | Art Unit | | |
| | | Richard G Hutson | 1652 | | |
| The MAILING DATE of this c mmunication appears n the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | |
| _ | nsive to communication(s) filed on | | | | |
| <i>'</i> | | is action is non-final. | | | |
| 3)☐ Since t | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | |
| 4) Claim(s) 1-7 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6) Claim(s) is/are rejected. | | | | | |
| 7) Claim(s |) is/are objected to. | | | | |
| 8) Claim(s |) <u>1-7</u> are subject to restriction and/or ele | ection requirement. | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| , , , | oosed drawing correction filed on | | oved by the Examiner. | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) All b) Some * c) None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | |
| Attachment(s) | | | | | |
| 2) Notice of Drafts | ences Cited (PTO-892) person's Patent Drawing Review (PTO-948) closure Statement(s) (PTO-1449) Paper No(s) _ | 5) Notice of Informal I | (PTO-413) Paper No(s) Patent Application (PTO-152) | | |
| J.S. Patent and Trademark Offic | ce | | | | |

Application/Control Number: 09/744,100

Art Unit: 1652

DETAILED ACTION

Claims 1-7 are present for examination.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-5, drawn to an isolated nucleic acid fragment encoding an N-acetylglutamate kinase selected those nucleic acids that encode an amino acid sequence at least 95% identical to the amino acid sequences selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, and SEQ ID NO: 8 and chimeric genes and host cells comprising said nucleic acid fragments.

Group II, claim(s) 6, drawn to an isolated nucleic acid fragment encoding an N-acetylglutamate kinase having the amino acid sequence set forth in SEQ ID NO: 12 with the claimed variations.

Group III, claim(s) 1-7, drawn to a method for evaluating a compound for its ability to inhibit the activity of an N-acetylglutamate kinase comprising using a nucleic acid which encodes an N-acetylglutamate kinase.

NOTE: for invention I above, restriction to one of the following (A) through (D) is also required.

- (A). SEQ ID NO: 1 or a sequence encoding SEQ ID NO: 2.
- (B). SEQ ID NO: 3 or a sequence encoding SEQ ID NO: 4.
- (C). SEQ ID NO: 5 or a sequence encoding SEQ ID NO: 6.
- (D). SEQ ID NO: 7 or a sequence encoding SEQ ID NO: 8.

Page 3

Application/Control Number: 09/744,100

Art Unit: 1652

The inventions listed as Groups I through III and (A) through (D) do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The products of Groups I and II and (A) through (D) are directed to completely different polynucleotides which are structurally unrelated and do not share the same or corresponding special technical features. The only shared technical feature of the different polynucleotides of Groups I and II and (A) through (D) and the method of Group III is a nucleic acid that encodes an N-acetylglutamate kinase. As Kaneko et al. (DNA Research, Vol 3, page 109-136, 1996 and EMBL Database Accession Number BAA17356, 2/7/1999, see IDS references) teach a nucleic acid encoding an Nacetylglutamate kinase, the shared technical feature is not a special technical feature. Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Application/Control Number: 09/744,100

Art Unit: 1652

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard G Hutson whose telephone number is (703) 308-0066. The examiner can normally be reached on 7:30 am to 4:00 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on (703) 308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 for regular communications and (703) 305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Richard Hutson, Ph.D. Primary Patent Examiner Art Unit 1652

May 5, 2003